

## ABSTRACT

This invention relates to a device for determining vibration characteristics of vibrated, supported, generally round, substantially ellipsoid articles, such as eggs, comprising:

- an elastic hammer with handle and head, for tapping and thereby acoustically vibrating such article,
  - a handle drive element for reciprocating the hammer generally in a plane around an axis in the handle,
  - a microphone arranged immediately adjacent to and directed to the article, for picking up acoustic vibrations generated by the article, and
  - a signal processing means for processing the signals picked up by the microphone for determining vibration characteristics of the article,
- characterized in that the handle adjacent the axis consists of an arm portion to be driven which is connected, through a hinge element, with a handle end having at the extremity thereof a mount having therein a ball as a head, while at least the hinge element and the handle end form a hammer rod in one piece.

With great advantage, sorting machines of fruit or eggs can be equipped with such devices to determine firmness, or fracture, respectively, and to sort them accordingly.